

City of Rockville, Maryland

College Gardens Park Stormwater Project

Photo Submittal for 2012 APWA Public Works Project of the Year



City of Rockville, Maryland

College Gardens Park Stormwater Project

Challenges From The Original 1960s Park and Farm Pond



- No stormwater management for upstream area
- Pond level dropped during summer droughts
- Goose population degraded water quality and eroded banks
- Dam leaked and was compromised by tree roots

- Site erosion and drainage complaints
- Changing recreation demands
- Park paths were not ADA-compliant



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Pond Construction



Dam Liner Installation



Pond Structures



Forebay Pavers and Riser,
Low Flow Pipe & Pond

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Park Construction and Features



Overlook Decks

Wall and Pedestrian Bridge

Other Amenities



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Construction Considerations

- Erosion and sediment control
- Tree preservation
- Pedestrian safety
- Future Pond Maintenance Access



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Evolution of a Park





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Stream Restoration: Installed 500 linear feet of stream restoration using bioengineering techniques of natural stone placement, bank reshaping and native plantings



Construction



3 Months After Completion – Storm Flow



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Education and Outreach: Interpretive signs were installed on the pond's overlook decks





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Pond Performance

The new SWM pond during a large storm. It safely manages the diverted runoff without inundating the park decks, plaza or bridge. The fountain rises and falls with fluctuating pond levels.





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The New Stormwater Pond: Gained full water quality control and downstream channel erosion protection for the 79-acre drainage area



Water enters pond's forebay from a storm drain flow splitter



Extensive wetland plantings were protected by goose netting for first year after planting.

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The New Park



2,400 native wetland plants were installed in the pond



Pond fountain aerates the water and limits mosquitoes



Goose netting protection





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Park/Pond Concept Plan - 2006



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